April 2015 Vehicular Gate Operators



# **Section A1**

# **Vehicular Gate Operators - Reference Guide**

For current pricing, please use our Dealer Portal. <a href="http://doorking.com/dealer-distributor">http://doorking.com/dealer-distributor</a>

Date	Page	Comment
4-1-15	All	April, 2015 reference guide update.

Vehicular Gate Operators April, 2015

# **Solar Tax Credit**

Homeowners who purchase a solar powered gate operator manufactured by DoorKing, Inc. after December 31, 2008, may qualify for a 30% Federal Tax Credit off the installed cost of the system. This tax credit is available for the installed cost of the solar powered gate operator on the homeowner's Federal tax return.

The solar powered Gate Operator is considered a "Qualified Solar Electric Property" authorized by the Internal Revenue Code Section 25D under the definition provided in paragraph d.2 and as such qualifies for the Residential Energy Efficient Tax Credit. You will need to complete Federal Form 5695 and attach it to your personal tax return in order to claim this credit. If you have any questions regarding this Federal Tax Credit, Form 5695 or its instructions, please consult your tax adviser. You should also check with your state tax agency to see if your state offers any additional solar energy tax incentives.

#### What is Covered:

The solar system tax credit applies to the total installed cost of the solar gate operator system. This includes the related solar panel, gate operator, solar control box, access control device, remote controls, obstruction detection device(s), etc.

DoorKing Model 6002 Swing Gate Actuator (P/N 6002-080)\*

DoorKing Model 6003 Swing Gate Actuator (P/N 6003-080)\*

DoorKing Model 6004 Swing Gate Operator (P/N 6004-080)\*

DoorKing Model 6400 Swing Gate Operator (P/N 6400-080)\*

\* To qualify, must be installed with 4302-113, 4302-114 or 4302-115 Solar Control Box

DoorKing Basic Solar Control Box (P/N 4302-113)

DoorKing Single Gate Solar Control Box (P/N 4302-114)

DoorKing Dual Gate Solar Control Box (P/N 4302-115)

DoorKing Solar Panel (P/N 2000-076 or 2600-077)

Batteries; two (2) 18 Amp Hour (P/N 1801-004) or two (2) 35 Amp Hour (P/N 1801-005)

# What is Not Covered:

The cost of the gate itself, or work required to place the physical gate into proper working order (leveling, replacing hinges, etc.).

# **Qualifications:**

- The installation of a DoorKing Solar Powered Gate System
- Effective for tax years beginning after December 31, 2008
- Homeowners will need to use The Federal Tax Credit form 5695, Residential Energy Efficient Property Credit
- Homeowners will need to provide a copy of the "Manufacturer's Certification for Credit"
- The dwelling must be located in the United States and used as a residence by the taxpayer
- This offer is only available in the United States

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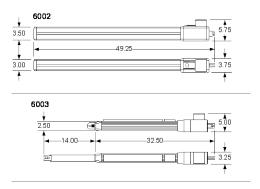
# **Swing Gate Operators**

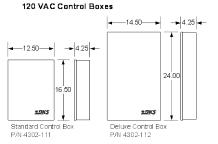
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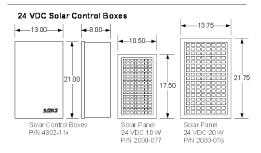
# Models 6002 / 6003

# 24 Volt DC Swing Gate Actuators

Swing gate actuators are designed to operate vehicular swing gates in residential applications where side room is minimal. These actuators install directly on the swing gate and operate on 24 Volt DC power. Control boxes are designed for both single and dual (bi-parting) gate operation and are powered by 120 VAC or 24 VDC with Solar power input.







## Step 1: Choose an Actuator

6002-080 (24 VDC) 6003-080 (24 VDC)

### Step 2: Choose a Control Box

4302-111 Standard Control Box (120 VAC) 4302-112 Deluxe Control Box (120 VAC)

- 120 VAC control boxes include two (2) 3.5 Ah batteries
- Deluxe control box includes three 120 VAC convenience outlets

4302-113 Solar Control Box (No Batteries)
4302-114 Solar Control Box (w/two 18 Ah batteries)
4302-115 Solar Control Box (w/two 35 Ah batteries)

2000-077 24 Volt, 10 Watt Solar Panel

- Use with 18 Ah batteries 2000-076 24 Volt, 20 Watt Solar Panel
- Use with 35 Ah batteries

Entrapment prevention devices (required)Pg 20	
Loops and loop detectorsPg 21	
8040-080 Ultra Low Power RF Receiver	
2000-110 Solar Panel Mount Bracket	
2600-755 30-ft. Bi-parting gate connection cable	
2600-756 40-ft. Bi-parting gate connection cable	
2600-757 50-ft. Bi-parting gate connection cable	
Swing gate accessoriesPg 10-11	
Gate operator accessoriesPg 22-24	

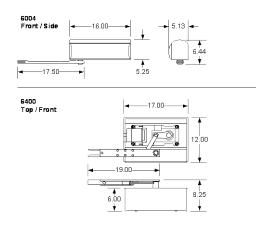
Model	Max Gate Weight (lbs.)	Max Gate Width (ft.)	Max Cycles (day)	Maximum Cycles on Backup Power**		
				3.5 Ah	18 Ah	35 Ah
6002	500	14	100	100	600	1200
6003	300	10	100	100	600	1200

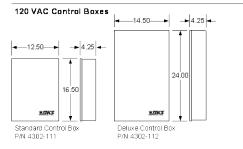
<sup>\*</sup> Cycles shown are for single operators when solar panel(s) are not providing a charge to the batteries. Actual number of cycles will vary depending on usage, accessories connected, gate weight, operating condition of gate, temperature, location, weather (cloud coverage) and charge state of the batteries.

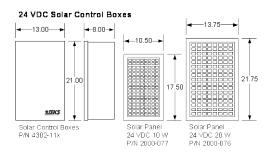
# Models 6004 / 6400

# 24 Volt DC Swing Gate Operators

The DKS Model 6004 mounts directly on the gate column while the DKS 6400 installs in-ground making it virtually invisible. These units operate on 24 Volt DC power. Control boxes are designed for both single and dual (bi-parting) gate operation and are powered by 120 VAC or 24 VDC with Solar power input.







#### Step 1: Choose an Operator

6004-080 (24 VDC) 6400-080 (24 VDC)

#### Step 2: Choose a Control Box

4302-111 Standard Control Box (120 VAC)

4302-112 Deluxe Control Box (120 VAC)

- 120 VAC control boxes include two (2) 3.5 Ah batteries
- Deluxe control box includes three 120 VAC convenience outlets

4302-113 Solar Control Box (No batteries)

4302-114 Solar Control Box (w/two 18 Ah batteries)

4302-115 Solar Control Box (w/two 35 Ah batteries)

2000-077 24 Volt, 10 Watt Solar Panel

• Use with 18 Ah batteries

2000-076 24 Volt, 20 Watt Solar Panel

• Use with 35 Ah batteries

Entrapment prevention devices (required)Pg 20
Loops and loop detectorsPg 21
8040-080 Ultra Low Power RF Receiver
2000-110 Solar Panel Mount Bracket
2600-755 30-ft. Bi-parting gate connection cable
2600-756 40-ft. Bi-parting gate connection cable
2600-757 50-ft. Bi-parting gate connection cable
Swing gate accessories Pg 10-11
Gate operator accessories Pg 22-24

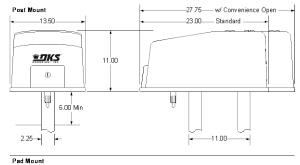
Model		Max Gate	Max Cycles (day)	Maximum Cycles on Backup Power**		
Wiodei		Width (ft.)		3.5 Ah	18 Ah	35 Ah
6004	500	8	100	100	600	1200
6400	300	8	100	100	600	1200

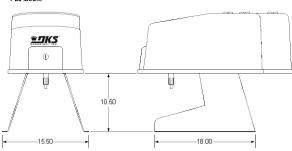
<sup>\*\*</sup> Cycles shown are for single operators when solar panel(s) are not providing a charge to the batteries. Actual number of cycles will vary depending on usage, accessories connected, gate weight, operating condition of gate, temperature, location, weather (cloud coverage) and charge state of the batteries.

# Models 6050 / 6100

# **Automatic Limit Swing Gate Operators**

These operators can be installed on mounting posts or directly onto a concrete mounting-pad. When ordering, choose both an operator AND an operator mounting kit. Secondary operators are used in bi-parting (dual) gate applications and are commanded from and powered from the primary operator. Secondary operators cannot be used as a stand-alone device.





## Step 1: Choose an Operator or Operator Set

6050-080 1/2 HP, 115V (4.3A) Primary 6050-081 1/2 HP, 115V (4.3A) Secondary

• Secondary includes 30-ft interconnection cable

6100-080 1/2 HP, 115V (5.4A) Primary 6100-081 1/2 HP, 115V (5.4A) Secondary 6100-082 1/2 HP, 115V (5.4A) Primary w/C.O. 6100-083 1/2 HP, 115V (5.4A) Secondary w/C.O.

- Secondary includes 40-ft interconnection cable
- C.O. = Convenience Open (gate opens upon AC power loss)

# Step 2: Choose an Arm / Mounting Kit(s)

2600-671 Pad Mount, Arms and Hardware Kit 2600-674 Post Mount, Arms and Hardware Kit

Entrapment prevention devices (required)Pg 20	
Loops and loop detectorsPg 21	
Backup power invertersPg 26	
1601-154 Heater Kit	

- Use if temperature routinely falls below 10°F (-12°C)
   6500-490 Uphill Arm Pivot Assembly
- Use with 1203-084 Torsion Rod Assembly (Pg 10)

  Swing gate accessories .......Pg 10-11

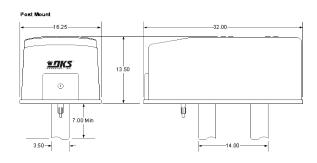
  Gate operator accessories .................Pg 22-24

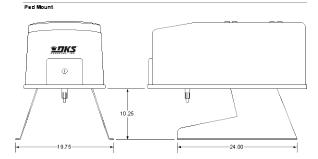
Model 6050 /	<sup>/</sup> 6100 Maximu	m Capacities	
Model	Max Gate Weight (Lbs)	Max Gate Width (Ft)	Max Cycles (Per Day)
6050	400	10	100
6100	500	14	Cont
6100 w/C.O.	400	14	Cont

# **Model 6300**

# **Automatic Limit Swing Gate Operators**

Designed to operate large vehicular swing gates in residential, commercial and industrial applications. These operators can be installed on mounting posts or directly onto a concrete mounting-pad – select mounting kit when ordering. Secondary operators are used in bi-parting (dual) gate applications and cannot be used as a stand-alone device.





Step 1: Choose an Operator or Operator Set

6300-080 1/2 HP, 115V (5.4A) Primary 6300-081 1/2 HP, Secondary 6300-082 1/2 HP, 115V (5.4A) Primary w/C.O. 6300-083 1/2 HP, Secondary w/C.O.

- Secondary includes 50-ft interconnection cable
- C.O. = Convenience Open (gate opens upon AC power loss)

6300-084 1 HP, 115V (9.7A) Primary 6300-085 1 HP, Secondary 6300-086 1 HP, 115V (9.7A) Primary w/C.O 6300-087 1 HP, Secondary w/C.O.

- Secondary includes 50-ft interconnection cable
- C.O. = Convenience Open (gate opens upon AC power loss)

# Step 2: Choose a Mounting Kit(s)

2600-264 Pad Mount, Arms and Hardware Kit 2600-263 Post Mount, Arms and Hardware Kit

Entranment prevention devices (required)

# **High Voltage Kit**

2600-266 High Voltage Kit

 Allows the operator to be powered from 208, 230, 460 or 575 source voltage. In dual gate applications, only one (1) kit is required (secondary operator DOES NOT require a high voltage kit).

# Accessories

Entrapment prevention devices (required) g 20
Loops and loop detectorsPg 21
Backup power invertersPg 26
1601-154 Heater Kit 115 VAC
1601-197 Heater Kit 208/230 VAC
1601-198 Heater Kit 460 VAC
6500-490 Uphill Arm Pivot Assembly
• Use with 1203-084 Torsion Rod Assembly (Pg 10)
Swing gate accessories Pg 10-11
Gate operator accessories Pg 22-24

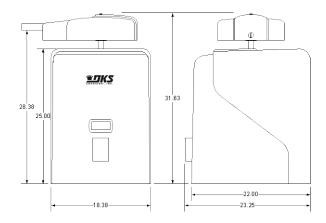
Model 6300 I	Maximum Capa	ncities	
Model	Max Gate Weight (Lbs)	Max Gate Width (Ft)	Max Cycles (Per Day)
1/2 HP	700	18	Cont
1/2 HP w/C.O.	600	18	Cont
1 HP	800	22	Cont
1 HP w/C.O.	700	22	Cont

Pø 20

# **Model 6500**

# **Adjustable Limit Swing Gate Operators**

Designed to operate large vehicular swing gates in residential, commercial and industrial applications. Secondary operators are used in bi-parting (dual) gate applications cannot be used as a stand-alone device.



#### Operators

6500-080 1/2 HP, 115V (5.4A) Primary

6500-081 1/2 HP, Secondary

6500-082 1/2 HP, 115V (5.4A) Primary w/C.O.

6500-083 1/2 HP, Secondary w/C.O.

- Secondary includes 50-ft interconnection cable
- C.O. = Convenience Open (gate opens upon AC power loss)

6500-084 1 HP, 115V (9.7A) Primary

6500-085 1 HP, Secondary

6500-086 1 HP, 115V (9.7A) Primary w/C.O

6500-087 1 HP, Secondary w/C.O.

- Secondary includes 50-ft interconnection cable
- C.O. = Convenience Open (gate opens upon AC power loss)

# **High Voltage Kit**

2600-266 High Voltage Kit

 Allows the operator to be powered from 208, 230, 460 or 575 source voltage. In dual gate applications, only one (1) kit is required (secondary operator DOES NOT require a high voltage kit).

Entrapment prevention devices (required)	Pg 20
Loops and loop detectors	Pg 21
Backup power inverters	Pg 26
6500-480 Heater Kit 115 VAC	
1601-197 Heater Kit 208/230 VAC	
1601-198 Heater Kit 460 VAC	
6500-490 Uphill Arm Pivot Assembly	

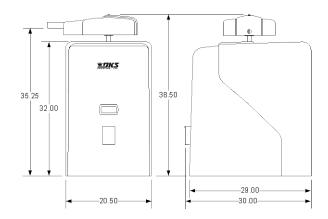
•	Use with 1203-084 Torsion Rod Assembly (Pg 10)	
Swir	ng gate accessoriesPg 10-12	1
Gate	e operator accessoriesPg 22-24	4

Model 6500 l	Model 6500 Maximum Capacities		
Model	Max Gate Weight (Lbs)	Max Gate Width (Ft)	Max Cycles (Per Day)
1/2 HP	700	18	Cont
1/2 HP w/C.O.	600	18	Cont
1 HP	800	22	Cont
1 HP w/C.O.	700	22	Cont

# **Model 6524**

# **Adjustable Limit DC Swing Gate Operator**

The model 6024's main power source is 115 or 230 Volt (switch selectable) single-phase AC power. The operational voltage of the operator is 24 Volt DC and includes built-in battery backup (7.5 AH battery x 2) that provides continued gate operation if the main source power is lost. This operator is designed to operate vehicular swing gates in residential and light commercial applications.



#### Operator

6524-080 1/2 HP, 24V DC (1.8A / 0.9A)

• 115 or 230 VAC Input power

6524-081 1/2 HP, 24V DC (8.5A)

 24 VDC Solar Input power only (supply your own batteries and solar system or use DKS solar kit)

#### Options

1801-004 12-Volt, 18 Amp Hour Battery

• Two (2) required.

#### Accessories

Entrapment prevention devices (required)Pg 20
Loops and loop detectorsPg 21
Backup power invertersPg 26
6550-480 Heater Kit 115 VAC
1601-197 Heater Kit 208/230 VAC
Heaters are active only when AC source power is

 Heaters are active only when AC source power is present

6500-490 Uphill Arm Pivot Assembly

Use with 1203-084 Torsion Rod Assembly (Pg 10)

Swing gate accessories	Pg 10-11
Gate operator accessories	Pg 22-24

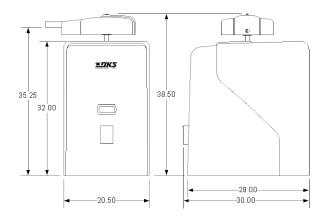
Max Gate Weight (lbs.)	Max Gate Width (ft.)	Max Cycles on AC Power  AC Power		,	•
weight (ibs.)	wiath (it.)	AC Power	7.5 Ah	18 Ah	
800	16	Continuous	40	150	

<sup>\*\*</sup> Actual number of cycles will vary depending on usage, accessories connected, gate weight, operating condition of gate, temperature and charge state of the batteries.

# **Model 6550**

# **Adjustable Limit Swing Gate Operators**

Designed to operate very large vehicular swing gates in commercial and industrial applications. Secondary operators are used in bi-parting (dual) gate applications cannot be used as a stand-alone device.



# Operators

6550-080 1 HP, 115V (9.7A) Primary 6550-084 1 HP, Secondary

• Secondary includes 50-ft interconnection cable

# **High Voltage Kit**

2600-266 High Voltage Kit

 Allows the operator to be powered from 208, 230, 460 or 575 source voltage. In dual gate applications, only one (1) kit is required (secondary operator DOES NOT require a high voltage kit).

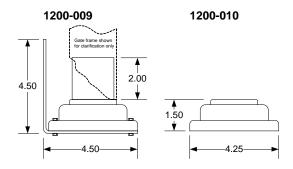
Entrapment prevention devices (required)Pg 20
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Backup power invertersPg 26
6550-480 Heater Kit 115 VAC
1601-197 Heater Kit 208/230 VAC
1601-198 Heater Kit 460 VAC
6500-490 Uphill Arm Pivot Assembly
• Use with 1203-084 Torsion Rod Assembly (Pg 10)
Swing gate accessoriesPg 10-11
Gate operator accessoriesPg 22-24

Model 6550 Maximum Capacities			
Model	Max Gate Weight (Lbs)	Max Gate Width (Ft)	Max Cycles (Per Day)
1 HP	2000	25	Cont

# **Swing Gate Accessories**

# Hinges, Torsion Rod Counter-Balance

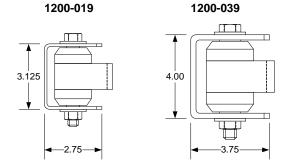
The DKS Swing Gate Hinges are designed for heavy wrought iron gates. When using the flange style hinge, two are used at the extreme top and bottom of the gate. When using the standard style hinge, the hinge can be welded to a gate mounting post at almost any position and to the gate itself. For un-level swing gates, the torsion rod assembly provides a method to counter-balance the gate to prevent gate runaway and relieves pressure on the gate operator. By adding additional torsion rods (6 maximum), heavier gates can be accommodated.



## Flange Bearing Hinge

1200-009 3000 Lb Weight Capacity 1200-010 Replacement Bearing

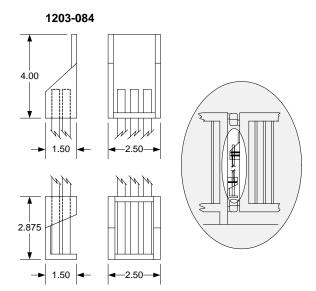
- Zert grease fitting
- Includes mounting bracket and hardware
- Two required per gate (top, bottom)
- Designed for use with 2" gate frame



## **Sealed Bearing Hinge**

1200-019 2000 Lb Weight Capacity 1200-039 3000 Lb Weight Capacity

- Includes mounting bracket and hardware
- Two required per gate (top, bottom)
- Designed for use with round or square gate frames



## **Torsion Rod Assembly**

1203-084

2600-299 Additional Torsion Rods

- Counter-balances uphill swing gates
- Includes top bracket, bottom bracket and one (1) torsion rod
- Up to five (5) additional torsion rods can be added

# **Swing Gate Operator Parts & Accessories**

# Miscellaneous Parts & Accessories

#### **Circuit Boards**

4302-010

Used in models 6002, 6003, 6004 and 6400

4405-010

Used in model 6500, 6550

4502-009

Replacement PCB for models 601, 602, 605, 610, 615, 620, 625, 630

4502-010

Used in models 6050, 6100 and 6300

2340-010

Used in models 6100 and 6300 with convenience open option

#### **Replacement Parts & Components**

3004-010 Magnetic Counter Probe

Used in 601, 602, 605, 610, 615, 630, 6050, 6100, 6300 operators

6100-210 80-Tooth Worm Gear Kit

Includes clutch pads and 80-tooth delrin main drive gear for 605, 610, 615, 6050 and 6100 operators

2801-002 Clutch Disc

2600-644 100-Tooth Worm Gear

100-tooth delrin main drive gear for 620, 625, 630 and 6300 operators

6100-040 Cross-Shaft Housing Assembly

Includes cast housing, cross-shaft, worm drive gear and related hardware. Does not include output shaft, clutch plates or clutch disc. Used in 6050 and 6100 operators

6300-042 Cross-Shaft Housing Assembly

Includes cast housing, cross-shaft, worm drive gear and related hardware. Does not include output shaft, clutch plates or clutch disc. Used in 6300 operators

2600-675 Main Shaft

Replacement main shaft for 605, 610, 6050 and 6100 operators

2600-174 Main Shaft

Replacement main shaft for 630 and 6300 operators

4601-058 Fuse 5A

Used on 4302 -010 circuit board

### Base Plate, Mounting Pipes, Pivot Arm

2600-664 Concrete Base Plate

Use to mount the 6050 or 6100 post mount operators onto an existing concrete pad

2600-260 Mounting Pipe

Use with 6050 and 6100 post mount operators. 2-1/2 O.D. x 3-ft pipe, threaded on one end

6500-490 Uphill Arm Pivot Assembly

Use with 6050, 6100, 6300 and 6500 operators when the gate opens on an uphill or downhill slope. Should be used with 1203-084 Torsion Rod Assembly.

#### **Bi-Parting Connection Cable**

2600-754 Primary / Secondary Cable

500-ft roll

2600-755 Primary / Secondary Cable

30-ft roll

2600-756 Primary / Secondary Cable

40-ft roll

2600-757 Primary / Secondary Cable

50-ft roll

## Miscellaneous

2600-770 Moly D Grease

14 oz. tube Molybdenum Disulfide (Moly D) multi-purpose grease for swing gate worm gears

2600-220 Touch-up Paint, White

2600-221 Touch-up Paint, Light Gray

2600-222 Touch-up Paint, Tan

2600-223 Touch-up Paint, Charcoal Gray

## **Batteries**

1801-009 Battery

12 Volt, 3.5 Amp Hour

1801-004 Battery

12 Volt, 18 Amp Hour

1801-005 Battery

12 Volt, 35 Amp Hour

April 2015 Vehicular Gate Operators

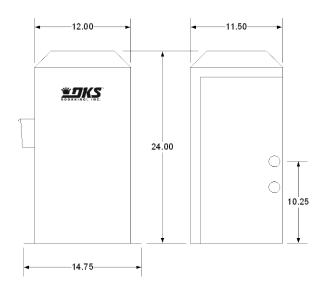
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# Models 9050 / 9100

# **Automatic Limit Slide Gate Operators**

The model 9050 is designed for limited-duty residential applications only. The model 9100 is designed for continuous-duty residential and commercial applications and has a full feature circuit board. 20-feet of #40 chain is included with these operators.



#### Operators

9050-080 1/2 HP, 115V (4.3A) 9100-080 1/2HP, 115V (5.4A)

#### Options

2600-862 Fail-secure lock kit

#### Accessories

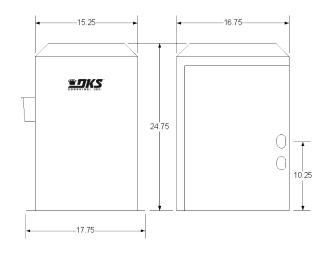
Entrapment prevention devices (required)	Pg 20
Loops and loop detectors	Pg 21
Backup power inverters	Pg 26
1601-154 Heater Kit 115 VAC	

Model 9050 /	<sup>'</sup> 9100 Maximu	m Capacities	
Model	Max Gate Weight (Lbs)	Max Gate Length (Ft)	Max Cycles (Per Day)
9050	500	16	100
9100	1000	30	Cont

# **Model 9150**

# **Automatic Limit Slide Gate Operators**

The model 9150 slide gate operator is designed to operate vehicular sliding gates in residential commercial and industrial applications. The operator has a full feature circuit board and includes 20-feet of #40 chain.



# Operators

9150-084 1/2 HP, 115V (5.4A) 9150-086 1/2 HP, 115V (5.4A) w/C.O.

9150-080 1 HP, 115V (9.7A) 9150-082 1 HP, 115V (9.7A) w/C.O

C.O. = Convenience Open which opens gate upon AC power loss

# **High Voltage Kit**

2600-266 High Voltage Kit

 Allows the operator to be powered from 208, 230, 460 or 575 source voltage.

# Options

2600-865 Fail-secure lock kit

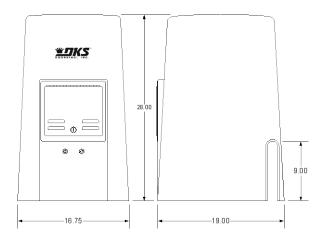
Entrapment prevention devices (required)Pg 20
Loops and loop detectorsPg 21
Backup power invertersPg 26
1601-154 Heater Kit 115 VAC
1601-197 Heater Kit 208/230 VAC
1601-198 Heater Kit 460 VAC
2600-495 Base plate (use for post mounting)
Additional chainPg 18
Bi-parting gate connection cablePg 18
Slide gate accessories Pg 16-18
Gate operator accessories Pg 22-24

Model 9150 N	laximum Capa	cities	
Motor	Max Gate Weight (lbs.)	Max Gate Length (ft.)	Cycles (day)
1/2 HP	1000	30	Cont.
1/2 HP w/C.O.	800	30	Cont.
1 HP	1500	45	Cont.
1 HP w/C.O.	1300	45	Cont.

# **Model 9000**

# **Adjustable Limit Slide Gate Operators**

The model 9000 slide gate operator is designed to operate vehicular sliding gates in residential commercial and industrial applications. The operator has a full feature circuit board and includes 20-feet of #40 chain. Secondary operators are used in bi-parting (dual) gate applications and are commanded from and powered from the primary operator. Secondary operators cannot be used as a stand-alone device.



#### Operators

9000-080 1/2 HP, 115V (5.4A) Primary 9000-081 1/2 HP, 115V (5.4A) Secondary

# High Voltage Kit (1/2 HP operator only)

2600-266 High Voltage Kit

 Allows the operator to be powered from 208, 230, 460 or 575 source voltage.

9000-085 1 HP, 115V (9.7A) Primary 9000-086 1 HP, 115V (9.7A) Secondary 9000-087 1 HP, 208V 1<sup>Ø</sup> (5.0A) 9000-088 1 HP, 230V 1<sup>Ø</sup> (4.9A)

 Secondary operator is not available for 208 / 230 Volt 1<sup>ø</sup> units

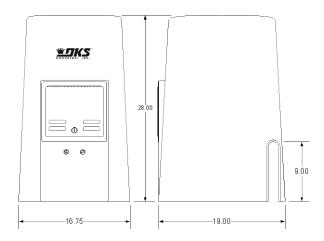
Entrapment prevention devices (required)Pg 20
Loops and loop detectorsPg 21
Backup power invertersPg 26
1601-154 Heater Kit
1601-197 Heater Kit 208/230 VAC
1601-198 Heater Kit 460 VAC
9000-015 Post Mount Kit
• Includes baseplate, mounting posts and hardware.
2600-755 30-ft. Bi-parting gate connection cable
2600-756 40-ft. Bi-parting gate connection cable
2500 757 50 6 8:
2600-757 50-ft. Bi-parting gate connection cable
Additional chainPg 18
1 33

Model 9000 Maximum Capacities						
Motor	Max Gate Weight (lbs.)	Max Gate Length (ft.)	Cycles (day)			
1/2 HP	1000	35	Cont.			
1 HP	1500	35	Cont.			

# **Model 9024**

# **Adjustable Limit DC Slide Gate Operator**

The model 9024's main power source is 115 or 230 Volt (switch selectable) single-phase AC power. The operational voltage of the operator is 24 Volt DC and includes built-in battery backup (7.5 AH battery x 2) that provides continued gate operation if the main source power is lost. This operator is designed to operate vehicular slide gates in residential and light commercial applications.



#### Operators

9024-080 1/2 HP, 24V DC (1.8A / 0.9A)

• 115 Or 230 VAC Input power.

9024-081 1/2 HP, 24V DC (8.5A)

 24 VDC Solar Input power only (supply your own batteries and solar system or use DKS solar kit)

#### Options

1801-004 12-Volt, 18 Amp Hour Battery

Two (2) required.

#### Accessories

Entrapment prevention devices (required)P	રુ 20
Loops and loop detectorsP	g <b>2</b> 1
Backup power invertersP <sub>{</sub>	g <b>2</b> 6
1601-154 Heater Kit	
1601 107 Hanton Kit 200 /220 VAC	

1601-197 Heater Kit 208/230 VAC

 Heaters are active only when AC source power is present

# 9000-015 Post Mount Kit

• Includes baseplate, mounting posts and hardware.

Additional chain	Pg 18
Slide gate accessories	g 16-18
Gate operator accessories	g 22-24

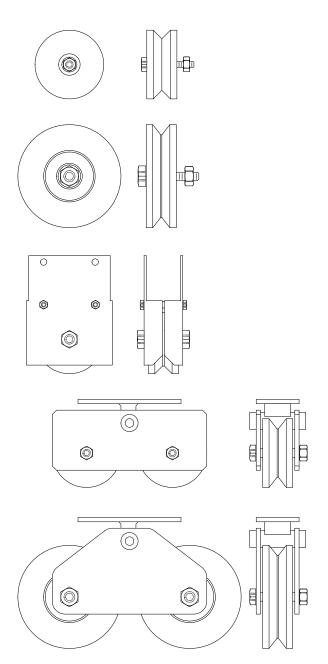
Max Gate	Max Gate Width (ft.)		Maximum Cycles on Backup Power**	
Weight (lbs.)	wiath (it.)		7.5 Ah	18 Ah
1000	40	Continuous	40	150

<sup>\*\*</sup> Actual number of cycles will vary depending on usage, accessories connected, gate weight, operating condition of gate, temperature and charge state of the batteries.

# **Slide Gate Accessories**

# **V-Wheels**

DKS V-wheels are used in slide gate applications that utilize an inverted "V" type track. V-Wheel assemblies are designed for 2 inch gate frames and tandem assemblies can be used on any size frame.



# **Replacement V-Wheels**

1201-004

- 4-inch UHMW Sleeve Bearing 500 Lb Max Wt
   1201-006
- 4-inch UHMW Sealed Bearing 750 Lb Max Wt 1201-016
- 4-inch Steel Sealed Bearing 1500 Lb Max Wt 1201-000
- 6-inch Steel Sealed Bearing 2500 Lb Max Wt

#### V-Wheel Assemblies

1201-102

- 4-inch UHMW Sleeve Bearing 500 Lb Max Wt 1201-105
- 4-inch UHMW Sealed Bearing 750 Lb Max Wt 1201-117
- 4-inch Steel Sealed Bearing 1500 Lb Max Wt

# 4 Inch Tandem V-Wheel Assemblies

1201-012

- 4-inch UHMW Sealed Bearing 1500 Lb Max Wt 1201-010
- 4-inch Steel Sealed Bearing 3000 Lb Max Wt

# 6 Inch Tandem V-Wheel Assembly

1201-210

6-inch Steel Sealed Bearing 5000 Lb Max Wt

0

3.125

2600-818

1204-004

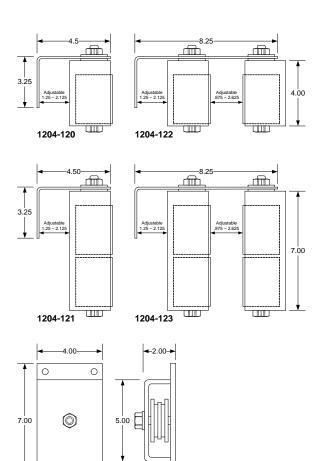
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-5.50

# **Slide Gate Accessories**

# Guide Rollers, Chain Idler, End Catch

Guide rollers are guarded to meet current industry safety standards. The DKS chain idler assembly is used when slide gate operators are rear-mounted. The end retainer provides a guide for slide gates to slip into, and has a cap that prevents the gate from being lifted off the track when it is in the full closed position.



#### 3 Inch Guide Rollers

1204-120 Single

1204-122 Dual

1204-005 3-Inch replacement roller

Use two for 6-inch roller

#### **6 Inch Guide Rollers**

1204-121 Single

1204-123 Dual

# **Chain Idler Assembly**

2600-818

 Use with rear-mount slide gate operators. Works with #40 and #41 chain

# **End Catch**

1204-004

2.00

**4**—2.75—▶

Designed for gates with 2-inch frame

# **Slide Gate Operator Parts & Accessories**

# Miscellaneous Parts & Accessories

#### **Circuit Boards**

4402-009

Used in model 9300 1 HP only

4402-010

Used in models 1150, 9200, 9300 (1/2 HP only)

4403-010

Used in model 9310

4405-010

Used in model 9000

4602-009

Replacement PCB for models 910, 915, 920

4602-010

Used in models 9100, 9150

4702-009

Replacement PCB for models 905, 907

4702-010

Used in models 9050, 9070

2340-010

Used in model 9150 with convenience open option

# **Replacement Parts & Components**

2600-903 Drive Shaft Assembly

Used in models 905, 907, 910, 9050, 9070, 9100

2600-904 Drive Shaft Assembly

Used in models 915 and 9150

2600-860 Solenoid Lock Assembly

Used in models 9050, 9070, 9100 and 9150

2600-861 Solenoid Lock Assembly

Used in model 9310 operator

1801-009 Battery

12 Volt, 3-Amp Hour battery

#### Chain

2600-443 Nickel Plated #41 Chain - 10 Ft

2600-444 Nickel Plated #40 Chain - 10 Ft

2600-475 Stainless Steel #41 Chain - 20 Ft

2600-441 #41 Chain - 20 Ft

2600-442 #40 Chain - 20 Ft

2600-271 Chain Stop for #40 and #41 Chain

2600-961 Chain Link Fence Gate Bracket

#### **Base Plates**

2600-418 Steel Base Plate

Use with 9050 and 9100 operators

2600-495 Steel Base Plate

Use with 9150 operator

2600-970 Base Plate Stop Bracket

Use with 2600-418 and 2600-495

9310-201 Steel Base Plate

Use with 9310 1/2 HP operators

9310-202 Steel Base Plate

Use with 9310 1 HP operators

# **Bi-Parting Connection Cable**

2600-754 Primary / Secondary Cable

500-ft roll

2600-755 Primary / Secondary Cable

30-ft roll

2600-756 Primary / Secondary Cable

40-ft roll

2600-757 Primary / Secondary Cable

50-ft roll

## Miscellaneous

2600-220 Touch-up Paint, White

2600-221 Touch-up Paint, Light Gray

2600-222 Touch-up Paint, Tan

2600-223 Touch-up Paint, Charcoal Gray

April 2015 Vehicular Gate Operators

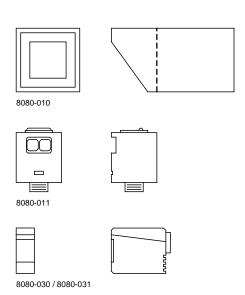
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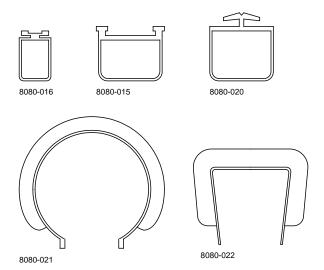
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# **Entrapment Prevention Devices**

# Type B1 and Type B2

Entrapment prevention devices are required in almost all general access automated gate applications. Photo-cells are used as type B1 (non-contact sensors) devices. Electric edges are used as type B2 (contact sensors) devices.





#### Type B1 Non-Contact Sensors

8080-010 Infrared Thru-Beam (Do not use with 9200 and 9500 series operators)

- 24 Volt AC / DC
- 65-foot maximum sensing distance
- Separate sender and receiver
- Includes hood and heated enclosure

#### 8080-011 Photo Reflective

- 24 Volt AC / 12 24 Volt DC
- 30-foot maximum sensing distance

#### 8080-030 Polarized Photo Reflective

- 24 Volt AC / 24 Volt DC
- 35-foot maximum sensing distance

#### 8080-031 Infrared Thru-Beam

- 24 Volt AC / 24 Volt DC
- 65-foot maximum sensing distance
- Separate sender and receiver

# **Type B2 Contact Sensors**

8080-016 6-Foot Edge (ME111)

- Includes mounting channel ideal for barrier arms 8080-015 5-Foot Edge (ME123)
- Includes mounting channel

8080-020 5-Foot Edge (MGO20)

- Sensitive on all 3 sides includes mounting channel 8080-021 5-Foot Edge (MGR20)
- Designed to fit on 2-inch round gate post 8080-022 5-Foot Edge (MGS20)
- Designed to fit on 2-inch square gate post

# **Contact Sensor Accessories**

8060-061 Wireless RF Kit

 Receiver (12-24 Volt AC/DC) and transmitter housed in NEMA 4 enclosure with low battery alarm

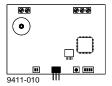
8080-017 Coiled Cord 16-Feet

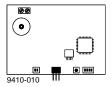
8060-076 Plastic Receiver Box

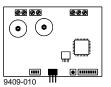
# Vehicle Protection

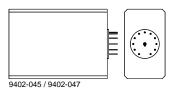
# **Loop Detectors and Loops**

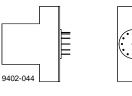
Loop detectors and loops are strongly recommended on all automated vehicular gate applications to help prevent gates from closing on vehicles in the path of the gate.

















# 9411-010 DKS Single Channel + Aux Relay

Plug-in Loop Detectors - DKS operators only

Use this detector when interfacing barrier gate operators with a photo-beam for enhanced pedestrian protection, or in any application where a dry relay contact is needed in addition to the loop call function.

9410-010 DKS Single Channel 9409-010 DKS Two Channel

# **Loop Detectors**

9402-045 Reno A&E 12/24 Volt DC or 24 Volt AC 9402-047 Reno A&E 120 Volt AC

- Reno A&E detectors have 2 relay outputs
- Reno A&E detectors require 9402-061 wire harness

9402-044 Carlo Gavazzi 24 Volt AC or DC

- Carlo Gavazzi detector 2 relay outputs
- Requires 9402-061 wire harness

9402-050 Diablo 10-30 Volt AC or DC

Ultra Low Power for solar applications

9402-061 Wire Harness

# Loop Wire - 18 AWG - XLPE Insulation

9402-076 500-Ft Roll - Black

9402-077 1000-Ft Roll - Black

9402-078 500-Ft Roll - Blue

9402-079 1000-Ft Roll - Blue

9402-080 500-Ft Roll - Red

9402-081 1000-Ft Roll - Red

#### Prefabricated Loops, 24-Ft Circumference, 50-Ft Lead-In

9401-060 Blue Loop Wire / PLIOVIC Tubing 9401-061 Yellow Loop Wire / PLIOVIC Tubing 9401-062 Red Loop Wire / PLIOVIC Tubing

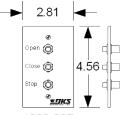
# **Loop Miscellaneous**

2600-771 Asphalt Sealant (Black) - 10 oz. Tube 2600-772 Concrete Sealant (Gray) - 10 oz. Tube 9401-045 Loop Test Meg-Ohm Meter

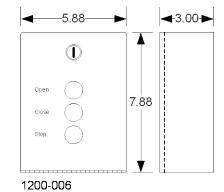
# **Control Stations**

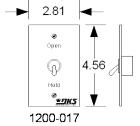
# **Manual Control**

Gate operator control stations provide complete manual control for DKS vehicular gate operators. The unique logic inputs found on DKS gate operators require only 3 wires for connection to a 3-button control station.



1200-007





1200-007

- 3-button interior open-close-stop
- Mounts into single-gang electric box
- Use for most DKS gate operators (cannot be used with model 9000)

#### 1200-006

- 3-button interior/exterior open-close-stop
- Surface or post mounted
- Use for most DKS gate operators (cannot be used with model 9000)

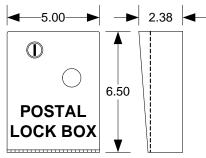
# 1200-017

- Open-hold-normal gate control
- Mounts into single-gang electric box

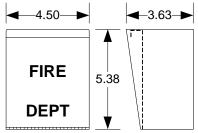
# **Lock Boxes**

# **Postal and Fire Department**

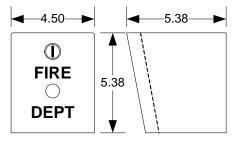
Postal and Fire Department lock boxes provide a method for these authorities to gain access through a vehicular access gate.



1402-080



1400-080



1401-080

#### 1402-080

- Accepts standard postal key lock
- Postal lock can be installed to either open the 1402 box, or activate a door or gate
- Surface or post mount
- Painted postal blue

#### 1400-080

- Accepts Fire Department pad lock
- Cover opens and activates a switch when the pad lock is removed
- Gate or door will hold open until the cover is closed and the pad lock replaced
- Surface or post mount
- Painted bright red

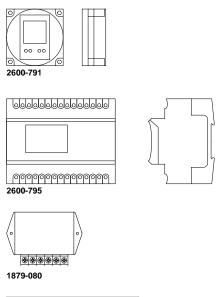
# 1401-080

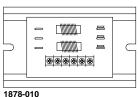
- Accepts Knox 3501 key switch
- Surface or post mount
- Faceplate painted bright red, box is painted black

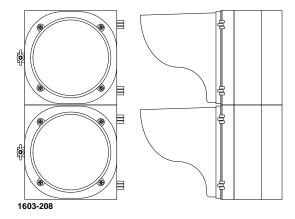
# **Accessories**

# **Time Clock & Surge Suppressers**

Electronic time clocks are ideal for use in applications where an access control system does not control "hold open" time periods. Vehicular gate operators and barrier gate operator systems are typical. Surge suppressers are designed to provide additional protection to equipment in areas prone to voltage spikes and surges. Surge suppressers come with a plastic mounting bracket. Red / Green traffic signal is ideal for all vehicular gate applications – providing a visual signal when the gate is safe to drive through.







#### **Time Clocks**

# 2600-791

- 7 Day Time Clock
- 20 programs
- 24 Volt AC input power
- Form "C" dry contact relay

#### 2600-795

- 365 Day Time Clock
- 7-Day and 24 hour programming features
- Holiday programming
- Automatic leap-year adjustment through 2095
- Daylight savings time
- 24 Volt AC input power

#### **Surge Suppressers**

#### 1879-080

High Voltage (110-120 VAC)

#### 1878-010

Low Voltage (24-20 VAC)

# **Traffic Signal**

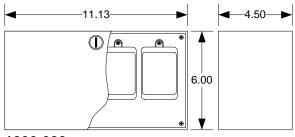
# 1603-208

- Red / Green traffic signal
- 8-inch lens

# **Accessory Transformers**

# 12, 16, 24 Volt AC & DC Transformers

A variety of accessory transformers are available to power the different products that we sell. AC transformers are typically used with access control devices and controllers, while DC transformers are used with magnetic locks and proximity card readers. Check the individual product to determine which transformer is required. NOTE: Many of our products INCLUDE a transformer.



# Transformer Box

#### 1200-080

- Holds up to four (4) 20-VA transformers
- Suitable for indoor and outdoor use
- Does not include transformers

# 1200-080

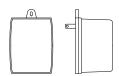


# 20 VA Transformers

1215-061 12-Volt AC Output 1804-059 24-Volt AC Output 1804-060 16-Volt AC Output

#### 20-VA Transformers

1215-061 12-Volt, AC 1804-059 24-Volt, AC 1804-060 16-Volt, AC



# **40 VA Transformer**

1508-060 16-Volt AC Output

# **40-VA Transformer**

1508-060 16-Volt, AC



# **DC Transformers**

1812-020 12-Volt 1000 mA 1812-139 24-Volt 500 mA

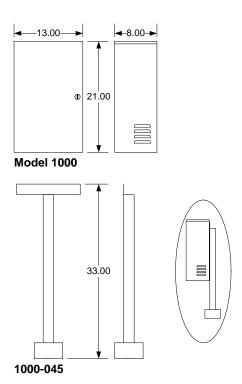
## **DC Transformers**

1812-020 12-Volt, 1000 ma 1812-139 24-Volt, 500 ma

# **Model 1000**

# **Back-up Power / Inverter**

The model 1000 Power Inverter is designed to provide backup AC power for the entire vehicular access control system when primary (AC) power fails. Unlike some backup systems which simply provide DC power for the gate operator itself, these inverters provide 120 Volt AC power to all components (gate operator, access control system, loop detectors, reversing devices, emergency vehicle access devices, etc.) of the access control system. The model 1000 is designed to provide power for two (2) gate operators and related access control system accessories.



#### Model 1000 Inverter

1000-080 1000 Watt, Modified Sine Wave

- Includes one (1) battery and will power one (1) 1/2 HP operator
- Use only with DoorKing gate operators

1000-082 1000 Watt, Pure Sine Wave

- Includes two (2) batteries and will power two (2) 1/2
   HP operators or one (1) 1 HP operator
- Suitable for use with all DoorKing and non-DoorKing brand gate operators

1000-045 Post Mount for 1000 Inverter 1000-048 Battery & Cable Assembly

Order this to add a second battery to the 1000 Watt inverter

1801-005 Battery

12 Volt, 35 AH SLA (Sealed Lead Acid) battery
 1000-044 Battery Cable Set